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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: T. IWASAKI et al.  
Serial No.: 09/255,856  
Filed: February 23, 1999  
For: SEMICONDUCTOR DEVICE AND METHOD FOR  
PRODUCING THE SAME  
Group: 2813  
Examiner: C. Bowers

RESPONSE TO RESTRICTION REQUIREMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

June 3, 1999

Sir:

In response to the restriction requirement dated May 3, 1999 in the above-identified application, applicants hereby respectfully traverse this restriction requirement.

With regard to the present claims, it is respectfully submitted that both the device claims 1 to 7 and the method claim 8 are very closely related to one another, to the point of justifying a common examination. Comparing the device claims 1-7 and method claim 8, for example, it is noted that both devices claims and the method claim are directed to a diffusion barrier formed of a ruthenium film formed on a semiconductor substrate, a copper film in contact with the ruthenium film and a second copper film in contact with the first copper film. It is also noted that the device claims specifically refer to the use of sputtering. Therefore, the

statement made in the Office Action that "the product as claimed can be made by another and material different processing such as using electron beam evaporation instead of sputtering" ignores the fact that the device claims themselves also refer to sputtering. One can take the position that equivalent techniques to sputtering (such as electron beam evaporation) could be used, but this would apply to both the device claims and the method claims. Accordingly, it is respectfully submitted that the common issues of these claims call for a common examination of both the device and method claims in this application. Such a common examination will avoid redundant efforts in searching and prosecuting which will almost surely result if this restriction requirement is not removed.

Further, it is urged that such a common examination is warranted, notwithstanding the fact that other methods could possibly be used for manufacturing the device, as pointed out in the Office Action. MPEP 803 specifies:

"If the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to distinct or independent inventions."


It is respectfully submitted that this is the situation here, given the close relationship between the device and the method claims in question. Accordingly, it is respectfully requested that the Examiner reconsider this restriction requirement in light of the above comments, and MPEP 803, and, correspondingly, remove the restriction requirement.

Although the applicants believe that the restriction requirement is not warranted for the reasons set forth above, in order to be fully responsive to the restriction requirement, applicants hereby elect Group I claims 1 to 7 drawn to the device, subject to the traverse provided herein.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, Deposit Account No. 01-2135 (501.36931X00), and please credit any excess fees to said deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS

  
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